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Entrez
PubMed

☐ 1: J Urol 1995 May;153(5):1706-10

Related Articles, [NEW Books](#), [LinkOut](#)

Immunotherapy of an experimental adenocarcinoma of the prostate.

Morales A, Nickel JC, Downey J, Clark J, van der Linden I.

PubMed
Services

Department of Urology, Queen's University, Kingston, Ontario, Canada.

Related
Resources

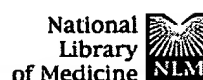
We have developed and tested a fractionated, purified and deproteinized emulsion of a mycobacterial cell wall (MCW) and report on a controlled study of this compound in the treatment of the experimental R3327-H adenocarcinoma of the prostate. The intraperitoneal route of administration was found ineffective at the weekly dose of 500 micrograms. The intratumoral administration of 1000 micrograms of MCW exhibited significant antitumor activity. Tumors larger than 2.2 cm.³ in volume showed evidence of temporary regression, but no cures were recorded in these animals. Complete tumor regression was found in 50% of the rats with tumor volumes less than 2.2 cm.³ at the onset of treatment. The animals in this group not responding initially were treated with a second 3-week course of MCW which resulted in complete tumor regression in one-half of the animals, for a total cure rate, in the smaller tumor cohort, of 75%. Mycobacterial cell wall is an effective biological response modifier in the Dunning R3327-H adenocarcinoma of the prostate in Copenhagen rats. Additional studies to elucidate the effect of the compound in relation to dose and tumor volume are underway.

PMID: 7715015 [PubMed - indexed for MEDLINE]

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i686-pc-intex-gpu Mar 27 2002 13:44:00



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Entrez
PubMed

☐ 1: J Immunother 1993 Nov;14(4):352-6

Related Articles, [NEW Books](#), [LinkOut](#)

Heat shock protein vaccines against cancer.

Blachere NE, Udonon H, Janetzki S, Li Z, Heike M, Srivastava PK.

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Services

Department of Pharmacology, Mount Sinai School of Medicine, New York, New York.

Related
Resources

Vaccination of mice with heat shock proteins (HSPs) derived from a tumor makes the mice resistant to the tumor from which the HSP was obtained. This phenomenon has been demonstrated with three HSPs--gp96, hsp90, and hsp70. Vaccination with HSPs also elicits antigen-specific cytotoxic T lymphocytes (CTLs). The specific immunogenicity of HSPs derives apparently, not from the HSPs per se, but from the peptides bound to them. These observations provide the basis for a new generation of vaccines against cancer. The HSP-based cancer vaccines circumvent two of the most intractable hurdles to cancer immunotherapy. One of them is the possibility that human cancers, like cancers of experimental animals, are antigenically distinct. The prospect of identification of immunogenic antigens of individual cancers from patients is daunting to the extent of being impractical. The observation that HSPs chaperone antigenic peptides of the cells from which they are derived circumvents this extraordinary hurdle. Second, most current approaches to cancer immunotherapy focus on determining the CTL-recognized epitopes of cancer cell lines. This approach requires the availability of cell lines and CTLs against cancers. These reagents are unavailable for an overwhelming proportion of human cancers. In contrast, the HSP-based vaccines do not depend on the availability of cell lines or CTLs nor do they require definition of the antigenic epitopes of cancer cells. These advantages, among others, make HSPs attractive and novel immunogens against cancer.

PMID: 8280719 [PubMed - indexed for MEDLINE]

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S5	0	S4 AND DENDR?
S6	0	S5 AND DENDRI?
S7	112	S4
S8	70	S4 NOT PY=>1998
S9	0	S2 AND S3\
S10	27	S2 AND S3
S11	18	S10 NOT PY=>1998

11/9/1

DIALOG(R)File 159:Cancerlit

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02409164 99035309 PMID: 9815709

Decreased antigen presentation by dendritic cells in patients with breast cancer.

Gabrilovich D I; Corak J; Ciernik I F; Kavanaugh D; Carbone D P

The Vanderbilt Cancer Center, Vanderbilt University School of Medicine, Nashville, Tennessee 37232-6838, USA.

Clin Cancer Res (UNITED STATES) Mar 1997, 3 (3) p483-90, ISSN 1078-0432 Journal Code: 9502500

Contract/Grant No.: RO1-CA61242; CA; NCI

Document Type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Subfile: INDEX MEDICUS

We evaluated T-cell responses to mitogens and to defined antigens in breast cancer patients. Significant defects in responses to tetanus toxoid and influenza virus were observed in patients with advanced-stage breast cancer. To define whether these defects were associated with a defect in antigen presentation [dendritic cells (DCs)] or effector function (T cells), these cells were studied separately. Purified DCs from 32 patients with breast cancer demonstrated a significantly decreased ability to stimulate control allogeneic T cells, but stimulation of patient T cells with either control allogeneic DCs or immobilized anti-CD3 antibody resulted in normal T-cell responses, even in patients with stage IV tumors. These data suggest that reduced DC function could be one of the major causes of the observed defect in cellular immunity in patients with advanced breast cancer. We then tested whether stem cells from these patients could give rise to functional DCs after in vitro growth with granulocyte/macrophage colony-stimulating factor and interleukin 4. Normal

levels of control allogeneic and tetanus toxoid-dependent T-cell proliferation were observed when DCs obtained from precursors were used as stimulators. Those cells also induced substantially higher levels of influenza virus-specific CTL responses than mature DCs from the peripheral blood of these patients, although responses did not quite reach control values. Thus, defective T-cell function in patients with advanced breast cancer can be overcome by stimulation with DCs generated from precursors, suggesting that these cells may better serve as autologous antigen carriers for cancer immunotherapy than mature peripheral blood DCs.

11/9/2

DIALOG(R)File 159:Cancerlit

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02363884 97383083 PMID: 9241074

A Phase I clinical trial of immunotherapy with interferon-gamma gene-modified autologous melanoma cells: monitoring the humoral immune response.

Abdel-Wahab Z; Weltz C; Hester D; Pickett N; Vervaert C; Barber J R; Jolly D; Seigler H F

Department of Surgery, Duke University Medical Center, Durham, North Carolina 27710, USA.

Cancer (UNITED STATES) Aug 1 1997, 80 (3) p401-12, ISSN 0008-543X
Journal Code: 0374236

Contract/Grant No.: 1R01-CA-64959-01; CA; NCI

Erratum in Cancer 1999 Oct 1;86(7) 1380

Document Type: Clinical Trial; Clinical Trial, Phase I; Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Subfile: AIM; INDEX MEDICUS

BACKGROUND: Tumor cells transduced with cytokine genes provide immunogenic vaccines for cancer immunotherapy. **METHODS:** A Phase I clinical trial was conducted for the specific active immunization of melanoma patients with interferon-gamma (IFN-gamma) gene-modified autologous melanoma tumor cells. Short term melanoma cultures were transduced retrovirally with the gene for human IFN-gamma. The genetically modified melanoma cells secreted biologically active IFN-gamma and showed enhanced expression of major histocompatibility complex class I and class II surface antigens. These cells were inactivated by irradiation (50 gray) and were cryopreserved for the vaccine. Twenty melanoma patients were enrolled in this clinical trial. The immunizations were administered in escalating doses once every 2 weeks for 3 months. The first and second injections consisted of 2 million cells, followed by 6 million for the third and fourth injections, and then 18 million for the fifth and sixth injections. The humoral immune responses of the patients were assessed by enzyme-linked immunoadsorbent assay, radioimmunoassay, and

radioimmunoprecipitation. RESULTS: Thirteen of the 20 patients completed the immunization protocol. Eight of these 13 patients showed a humoral immunoglobulin (Ig)G response against autologous and allogeneic melanoma cells. The other five patients either had no detectable antimelanoma antibodies or showed a weak IgG response that did not rise significantly above the preimmune level. All the sera contained low or undetectable levels of antimelanoma IgM antibodies. The IgG response increased progressively in titer during the course of immunization. The positive sera showed preferentially strong binding to melanoma cell lines and some cross-reactivity to nonmelanoma tumors. A 75-80 kD antigen on melanoma cells was immunoprecipitated by postimmune sera of 3 of the responding patients. Preimmune sera from these three patients and sera from other patients immunized with a standard nontransduced melanoma cell vaccine failed to precipitate this antigen. Two patients with significant increases in serum IgG had clinical tumor regression, and two additional patients with low serum IgG response had transient shrinkage of nodular disease during therapy. CONCLUSIONS: These data suggest that gene therapy with IFN-gamma-transduced melanoma cells is safe and worthy of further investigation in patients with less advanced stage malignant melanoma. The ability to monitor changes in the humoral responses of the immunized patients has been demonstrated.

11/9/3

DIALOG(R)File 159: Cancerlit

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02320639 PMID: 96710047

Defective function of dendritic cells in patients with breast cancer can be overcome by generation of these cells from precursors, a new approach to cancer immunotherapy (Meeting abstract).

Gabrilovich; Kavanaugh; Corak; Nadaf-Rahrov; Cunningham; Carbone
Simmons Cancer Center, UT Southwestern Medical Center, Dallas, TX 75235
Proc Annu Meet Am Soc Clin Oncol 1996, 15, ISSN 0732-183X

Document Type: MEETING ABSTRACTS

Languages: ENGLISH

Main Citation Owner: NOTNLM

Record type: Completed

The immunotherapy of patients with cancer has met with very limited success to date. Since dendritic cells (DC) are essential for immune induction and antigen-pulsed DC are one of the most promising new immunization approaches, in this study we tested the functional activity of both DC and T cells obtained from 26 patients with breast cancer and 14 control donors. No significant defects in T-cell function (proliferation upon allogeneic stimulation and stimulation with immobilized anti-CD3 antibody) were observed even in patients with advanced, Stage IV tumors. In contrast, the ability of DC from these patients to stimulate allogeneic control T cells was inversely related to tumor stage, being slightly

reduced even in patients with Stage I and II disease and profoundly suppressed in patients with Stage III and IV disease. Significantly reduced T-cell responses were also observed for soluble antigen (tetanus toxoid, TT) presented by DC collected from patients with Stage II, III and IV disease. No influenza-specific cytotoxic T cell responses were seen in peripheral blood T cells in response to influenza infected autologous DC in patients with Stages III and IV disease, whereas in patients with early stage breast cancer such responses were clearly detected. These data indicate a serious defect in DC function in patients with advanced stages of breast cancer. When DC were generated from peripheral blood precursors from these advanced stage patients, they were restored in their ability to stimulate control allogeneic T cells and for TT-dependent proliferation. Thus, DC generated from precursors should be the most effective antigen carrier for the induction of immunity in cancer patients. (C) American Society of Clinical Oncology 1997.

11/9/9

DIALOG(R)File 159: Cancerlit

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01811380 90349653 PMID: 2201036

Cancer immunotherapy with autologous and allogeneic vaccines: a practical overview.

Shinitzky M; Skornick Y

Department of Membrane Research, Weizmann Institute of Science, Rehovot, Israel.

Prog Clin Biol Res (UNITED STATES) 1990, 348 p95-125, ISSN 0361-7742
Journal Code: 7605701

Document Type: Journal Article; Review; Review, Tutorial

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Subfile: INDEX MEDICUS

(79 Refs.)

Tags: Animal; Comparative Study; Human

Major Descriptors: *Antigens, Neoplasm--immunology--IM; *Immunotherapy; *Neoplasms--therapy--TH; *Vaccines--immunology--IM

Minor Descriptors: Antigens, Neoplasm--administration and dosage--AD; Antigens, Neoplasm--isolation and purification--IP; Cell Membrane--drug effects--DE; Immunotherapy--methods--MT; Lymphocyte Transformation; Major Histocompatibility Complex; Neoplasm Proteins--immunology--IM; Neoplasm Transplantation; Neoplasms--immunology--IM; Neoplasms, Experimental--immunology--IM; Neoplasms, Experimental--therapy--TH; Tumor Cells, Cultured--drug effects--DE; Tumor Cells, Cultured--immunology--IM; Vaccines--classification--CL; Vaccines--isolation and purification--IP

CAS Registry No.: 0 (Antigens, Neoplasm); 0 (Neoplasm Proteins); 0 (Vaccines)

Record Date Created: 19900920
11/9/11
DIALOG(R)File 159:Cancerlit
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01670989 88229746 PMID: 3373233
Novel antigenic markers of human tumor regression.
Fareed G C; Mendiaz E; Sen A; Juillard G J; Weisenburger T H; Totanes T
International Genetic Engineering, Inc., Santa Monica, CA 90404.
J Biol Response Mod (UNITED STATES) Feb 1988, 7 (1) p11-23, ISSN
0732-6580 Journal Code: 8219656
Document Type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: INDEX MEDICUS

The development of tumor-specific antibodies was studied in a group of cancer patients undergoing active specific immunotherapy with irradiated human allogeneic and autochthonous (autologous) tumor cells injected by the intralymphatic route. Immunoblotting studies on extracts of various established tumor cell cultures and fresh tumor biopsies were performed using sera from these patients. Evaluable tumor regressions were associated with detection of antibodies against human tumor cell antigens of 22,000 daltons (22 kd), 38,000 daltons (38 kd), 43,000 daltons (43 kd), and 70,000 daltons (70 kd). Similar antigens of approximately 22, 43, and 70 kd have also been detected in fresh extracts of certain human tumor tissues when tested with antisera from patients responding to immunotherapy. Production of antibodies to these antigens may play a role in tumor regression with active specific immunotherapy. These human regression-associated antigens may, therefore, represent novel agents for cancer immunotherapy .

11/9/12
DIALOG(R)File 159:Cancerlit
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01669695 88193412 PMID: 3258774
[LAK cells and immunotherapy of cancer]
Cellules LAK et immunotherapie des cancers.
Khayat D; Weil M; Soubrane C; Jacquillat C
Laboratoire du Service d'oncologie medicale, Hopital de la Salpetriere,
Paris, France.
Bull Cancer (FRANCE) 1988, 75 (1) p3-7, ISSN 0007-4551
Journal Code: 0072416
Document Type: Journal Article English Abstract
Languages: FRENCH
Main Citation Owner: NLM
Record type: Completed

Subfile: INDEX MEDICUS

Cancer immunotherapy still appears very unsatisfactory in humans. However, it has been shown recently that Interleukin 2 (IL2) could be used to generate, in vitro as well as in vivo, a new anti-tumoral activity directed against fresh tumor cells, allogenic as well as autologous, both of leukemic and solid tumor origin. This activity is not connected with the NK activity, but with a lymphocyte sub-population termed 'Lymphokine Activated Killer (LAK) Cells'. The exact nature of these LAK cell precursors is still a matter of controversy: 'nul' lymphocyte, T or NK markers bearing lymphocytes, or different precursors according to the system of activation that has been used. However, after being activation, these LAK cells always express T cell-markers. The activation has a very short lifespan, explaining the need for a prolonged contact of the cells with IL2, and therefore the necessity to continue injecting the lymphokine in vivo. The clinical results that have been reported so far are still very preliminary. The most common treatment protocol consists of 5 days of IL2 injections followed by 5 days of leukapheresis and in vitro activation of the collected cells, and then auto-transfusion of the activated cells and IL2 during the next 5 days. The clinical toxicity encountered is impressive in terms of frequency as well as severity. Clinical activity seems to be relatively weak. Nevertheless, the concept still appears to be very promising.

11/9/13

DIALOG(R)File 159:Cancerlit

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01656129 PMID: 88641433

FIRST CLINICAL RESULTS IN UROLOGICAL TUMOR IMMUNOTHERAPY.

No affiliation given

Non-serial 1987, Present Status of Non-toxic Concepts in Cancer.

Klippel KF, Macher E, eds., Karger, p. 159-282, 1987.,

Document Type: CONGRESSES; MONOGRAPH

Languages: ENGLISH

Main Citation Owner: NOTNLM

Record type: Completed

This third section of the book consists of eleven articles. The first, Superficial Bladder Tumors (SBT), notes that the therapeutic strategies developed to reduce the high frequency of recurrences even after complete transurethral resection (TUR) include adjuvant intravesical chemotherapy and adjuvant intravesical immunotherapy, and lists the special requirements that should be met before such adjuvant treatments become widespread. The second article, Experimental and Clinical Aspects of Bladder Cancer Recurrence, presents data leading to the conclusion that the TUR of such tumors must be combined with local cytostasis, immune therapy, or photodynamic treatment. The third article, Bladder Cancer Induction and Prophylaxis in Animal Models, presents studies on the effects of

intravesical chemotherapy on normal urothelium in the rat or dog, on bladder tumor carcinogenesis induced by N-butyl-N-(4-hydroxybutyl)-nitrosamine (BBN) in the rat, and on BBN-induced bladder carcinomas in the rat. The fourth article, Immunotherapy in Bladder Cancer with KLH-Immunocyanin, reports that instillation therapy with KLH was effective in reducing recurrences following TUR of SBT and that no side effects were observed. The fifth article, Chemoimmune Prophylaxis of SBT, describes favorable results obtainable by treatment involving TUR followed by iv cyclophosphamide, intravesical instillation of BCG, and skin scarification with BCG. The sixth article, Indication for Adjuvant Therapy after TUR of SBT in Daily Urological Practice, describes the differentiation of SBT patients into three groups, based on certain prognostic parameters, and concludes from the results of the authors and the results published in the literature, that the differentiated use of 'wait and see,' of adjuvant vesical therapy, and of more aggressive treatment should be preferred to a general practice of adjuvant intravesical treatment. The seventh article, Active, Specific Immunotherapy with Autologous Tumor Cells Admixed with Corynebacterium Parvum in Patients with Metastatic Renal Cell Carcinoma, reports that survival was not improved in the treated patients, but that a temporary regression of metastases could be expected in 15-25% of the patients. The eighth article, Experimental and Clinical Studies on Cancer

Immunotherapy, presents the authors' studies under the following headings: amino-acid/trace-element regulatory complexes, tumor immunity, endocrine effects, antigenic modulation, nonspecific immune mechanisms, active immunity, inflammatory mediators, influence of neurogenic components, dietary supplementation of CNS components, attempts to reverse induced leukemia, trace elements, and clinical trials. The ninth article, Evidence of Immunocyanin Effect on Kidney Tumor Metastasis, describes results obtained when patients who had metastatic renal cell carcinoma were variously treated with allogenic vaccine plus KLH, autologous vaccine plus KLH, or KLH alone; the patients receiving KLH alone showed the best results. The tenth article, Immunotherapy in Prostatic Cancer, describes the successful use of autologous tumor cell vaccine in which the cells had been treated with mitomycin to kill the cells and with neuraminidase to expose the surface antigen. Revaccination could be administered at intervals of 6 wk, using deep frozen material. Efficacy of the treatment was demonstrated by the highly significant drop in serum phosphatases and by survival that was significantly prolonged relative to that of patients who had conventional hormonal treatment. The eleventh article is a synopsis of the preceding articles.

11/9/14

DIALOG(R)File 159:Cancerlit

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01517511 85281981 PMID: 3896456

Harnessing T-lymphocytes for human cancer immunotherapy .

Hirshaut Y; Slovin S F
Cancer (UNITED STATES) Sep 15 1985, 56 (6) p1366-73, ISSN 0008-543X
Journal Code: 0374236
Contract/Grant No.: 1 R01 CA39286; CA; NCI; CA32245; CA; NCI
Document Type: Journal Article; Review
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Subfile: AIM; INDEX MEDICUS

After nearly a decade of controversy, the concept of adoptive immunotherapy in humans is gaining greater acceptance. More recently, investigators have made use immunotherapeutically of T-lymphocytes nonspecifically activated in vitro by a number of agents, including lymphokines, lectins, and autologous and allogeneic tumor cells. The limitations for the investigational use of these highly specialized and "educated" lymphocytes have been the inability to generate sufficient numbers of cells in vitro for adoptive transfer experiments and to sustain their growth over long periods of time. While marked success has been demonstrated over the years in tumor-bearing animal models, the feasibility of such work in humans has been greatly improved by the experimental expansion and maintenance of immune lymphocytes (those exposed to antigenic challenge) in vitro using either highly purified or recombinant, interleukin 2. As a result, large numbers of lymphocytes can successfully be infused into patients, and whole body scans can show migration of these labeled cells to the lung, liver, and spleen. The use of nontoxic, nonspecific activated "killer" lymphocytes is an innovative approach with enormous potential. This report presents discussion of these findings and addresses the issue of an alternative approach to cancer treatment therapy, the in vivo use of cloned cytotoxic T-lymphocytes sensitized to the autologous tumor. (86 Refs.)

11/9/15

DIALOG(R)File 159:Cancerlit

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01318954 PMID: 82605113

ALIEN-DRIVEN DIVERSITY AND ALIEN-SELECTED ESCAPE: A
RATIONALE FOR
ALLOGENEIC CANCER IMMUNOTHERAPY .

Sondel; Hank

K4/430 Clinical Sciences Center, 600 Highland Ave., Madison, WI, 53792

Transplant Proc 1981, 13 (4) p1915-1921, ISSN 0041-1345

Document Type: MEETING PAPER; REVIEW

Languages: ENGLISH

Main Citation Owner: NOTNLM

Record type: Completed

We have presented two theories relating to the function of

histocompatibility antigens and their presence as alien antigens on tumor cells. The theory of alien-driven diversity suggests that the ability to effectively recognize pathogens in the form of 'altered-self' derives from prior exposure to antigens cross-reactive with 'altered-self' during development. Furthermore, these cross-reactive antigens are alloantigens that are expressed on autologous cells during somatic development. These somatically generated alloantigens could be the result of the same genetic alterations that produced the polymorphism of these antigens within the species. Second, the theory of alien-selected escape suggest that a tumorigenic pathogen selects a cell bearing an alien H* antigen so that the alien-infected cell is recognized as self rather than altered-self by the tumor host. We then summarized data from mouse and man consistent with these theories and with the concept that clinically evident tumors have escaped the host's immune system. Finally, we have discussed potential directions for devising immunotherapy with allogeneic cells that might circumvent the apparent unresponsiveness of the patient's immune system to his own tumor. (Author abstract) (20 Refs)

11/9/16

DIALOG(R)File 159: Cancerlit

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01310607 PMID: 81629817

CANCER IMMUNOPROPHYLLAXIS: A CAREFUL DIALOGUE.

Hollinshead

Div. Oncology, Dept. Medicine, George Washington Univ. Medical Center,
Lab. for Virus and Cancer Res., Washington, DC, 20037

Cancer Detect Prev 1981, 3 (2) p419-448, ISSN 0361-090X

Document Type: JOURNAL ARTICLE; REVIEW

Languages: ENGLISH

Main Citation Owner: NOTNLM

Record type: Completed

The role of immunology in prevention, screening, and early detection of cancer is reviewed. Lung cancer immunotherapy trials with purified tumor-associated antigens (TAA) are described. In the first trial, patients with Stage I lung cancer received methotrexate (MTX: 300 mg rapid iv and 700 mg infused over 6 hr), TAA (500 ug) emulsified with Freund's complete adjuvant (FcA), or MTX + TAA with FcA. Of 24 nonimmunized patients, 4/8 on chemotherapy and 8/16 with no therapy died; of 28 immunized patients, 4/15 on immunotherapy and 4/13 on immunochemotherapy died. At 4 yr, 80% of the immunized group is alive compared with 50% of the control group. In a second trial, patients with Stages I and II squamous cell lung cancer were treated by curative resection alone (27 patients), resection followed by TAA with FcA (24), or resection followed by adjuvant and antigen injected in separate sites (29). The 3-yr survival of these groups is 35%, 85%, and 90%, respectively. Patients reacted to allogeneic and autologous TAA, and TAA vaccination induced strong delayed hypersensitivity reactions that

lasted as long as 5 yr. Characteristics of TAA which induce cell-mediated immunoresponses are discussed. TAA immunoprophylaxis is recommended for groups at high risk for lung cancer. (54 Refs)

11/9/17

DIALOG(R)File 159:Cancerlit

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01288867 82130264 PMID: 7036482

Alien-driven diversity and alien-selected escape: a rationale for allogeneic cancer immunotherapy.

Sondel P M; Hank J A

Transplant Proc (UNITED STATES) Dec 1981, 13 (4) p1915-21, ISSN 0041-1345 Journal Code: 0243532

Contract/Grant No.: NCI P30-CA-14520; CA; NCI

Document Type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Subfile: INDEX MEDICUS

We have presented two theories relating to the function of histocompatibility antigens and their presence as alien antigens on tumor cells. The theory of alien-driven diversity suggests that the ability to effectively recognize pathogens in the form of "altered-self" derives from prior exposure to antigens cross-reactive with "altered-self" during development. Furthermore, these cross-reactive antigens are alloantigens that are expressed on autologous cells during somatic development. These somatically generated alloantigens could be the result of the same genetic alterations that produced the polymorphism of these antigens within the species. Second, the theory of alien-selected escape suggests that a tumorigenic pathogen selects a cell bearing an alien H* antigen so that the alien-infected cell is recognized as self rather than altered-self by the tumor host. We then summarized data from mouse and man consistent with these theories and with the concept that clinically evident tumors have escaped the host's immune system. Finally, we have discussed potential directions for devising immunotherapy with allogeneic cells that might circumvent the apparent unresponsiveness of the patient's immune system to his own tumor.

11/9/18

DIALOG(R)File 159:Cancerlit

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01118333 PMID: 78803840

SPECIFIC CANCER IMMUNOTHERAPY ADJUNCTIVE TO SURGERY FOR ADVANCED

GASTRIC CANCER: A REPORT OF SIX LONG TERM SURVIVORS.

Ishikawa; Fukushima; Machida; Kakuta; Nishikawa; Fukuda

1st Dept. Surgery, Hirosaki Univ. Sch. Medicine, Zaifu-cho 5-chome,
Hirosaki 036, Japan

Gastroenterol Jpn 1978, 13 (1) p54-60, ISSN 0436-1339

Document Type: JOURNAL ARTICLE

Languages: ENGLISH

Main Citation Owner: NOTNLM

Record type: Completed

Specific immunotherapy was used to treat 22 patients with advanced gastric cancer after non-curative resection of the lesion. Three methods of immunotherapy were used. Active immunization (AI) with autologous tumor antigen was performed by injecting antigen derived from the patient's own tumor (corresponding to 0.3-0.5 g of tumor tissue) into the forearm sc three times in 9 days. Cross-immunization (CI) and cross-transfusion (CT) was the second method used. Pairs of ABO-Rh matched patients with gastric cancer were cross-immunized with each tumor antigen. At 2 wk after the last antigen injection, 300 ml of blood from each patient was plasmapheresed. The WBC layer was transfused into the opposite member of the pair. The plasma and RBC were transfused back into the same patient. The cross-transfusion of WBC was performed three times in 9 days. The third method of specific immunotherapy was passive immunization (PI) with allogeneic lymphocytes which were sensitized with xenogeneic tumor-specific immune RNA; transfusions were performed three times in 9 days. Of 22 patients (17 Stage IV and 5 Stage III) treated with specific immunotherapy after noncurative resection, 6 survived greater than 5 yr (all Stage IV). The histological diagnoses in these six cases included papillary adenocarcinoma (2 cases) and moderately and poorly differentiated adenocarcinoma (4 cases). Three of these six patients received CI plus CT, two received PI, and one received AI. Overall, the 3-yr and 5-yr survival rates for the 22 patients treated with specific immunotherapy were 8/21 and 6/16, respectively. None of 70 non-curatively resected patients without immunotherapy survived 5 yr. (12 Refs)